

Work Order ID 73181

Friday, August 26, 2011 7:14:03 AM



Page 1

Item ID: D3909-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 9/9/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: CL Date: 11/08/26 Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3909	C								
100	Pick Kit	0.00							
Packaging	Memo	0.00							
Packaging									
110		0.00							
Small Fab	Memo	0.00							
Small Fab	1- Assemble as per dwg Trim rivet to 1.185" long								
120	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

EP 11/08/31 (4)

EP 11/08/31 (4)

(4)

Sub 131

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73181

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Friday, August 26, 2011 7:14:03 AM

Item ID: D3909-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 9/9/2011 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location ST 465 0.00

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release 0.00



QC

Memo

0.00

Quality Control

SP 11-08-31.11/9/11 mc
11-09-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 26, 2011 7:13:59 AM

Page 1

Work Order ID: 73181

Parent Item: D3909-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011





Required Date: 9/9/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP RevA: New issue DD verified by:EC
per dwg revB DD 10.04.20 verified by:EC

IPP Rev:B as

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2690-6  Lanyard Assembly		Manufactured	No			100	Each	16.0000	1	4			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST020				16					
				70920				16					
D3909-1  Lug Plate, Fwd Crosstube		Manufactured	No			100	Each	8.0000	2	8			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST090				8					
				71002				8					
D3909-3  Fwd Lower Attach Arm		Manufactured	No			100	Each	9.0000	1	4			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST081				9					
				57819				1					
				65628				8					
D3909-5  Eyebolt Stud		Manufactured	No			100	Each	5.0000	1	4			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST091				5					
				65629				5					

EP 11/08/31

EP 11/08/31

EP 11/08/31

EP 11/08/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 26, 2011 7:13:59 AM

Work Order ID: 73181

Parent Item: D3909-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011

Required Date: 9/9/2011

Start Qty: 4.00

Required Qty: 4.00

D3910-1 Manufactured No

100

Each

16.0000

2

8



Crosstube Lug

Location

Loc Qty

Loc Code

ENG

14

70160

14

st507

2

68263

2

8/26/08/31

D3917-1 Manufactured No

100

Each

23.0000

2

8



Washer

Location

Loc Qty

Loc Code

ST

23

72710

23

8/26/08/31

AN3C12A Purchased No

100

Each

90.0000

4

16



Bolts

Location

Loc Qty

Loc Code

ST351

90

117514

4

118112

5

118422

49

118451

32

8/26/08/31

AN3C13 Purchased No

100

Each

45.0000

1

4



Bolt

Location

Loc Qty

Loc Code

ST351

45

114714

45

8/26/08/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 26, 2011 7:14:00 AM

Work Order ID: 73181

Parent Item: D3909-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011

Required Date: 9/9/2011

Start Qty: 4.00

Required Qty: 4.00

MS17984-C413

Purchased

No

100

Each

23.0000

1

4



PIN, QUICK RELEASE

Location

Loc Qty

Loc Code

ST297

1

118546

1

ST315

22

114340

1

117557

1

118612

20

MS20615-4M20

Purchased

No

100

Each

216.0000

3

12



RIVET

Location

Loc Qty

Loc Code

GA

216

117071

46

118571

170

AN310C3

Purchased

No

100

Each

43.0000

1

4



Castellated Nut

Location

Loc Qty

Loc Code

ST349

43

114714

43

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 26, 2011 7:14:00 AM

Work Order ID: 73181

Parent Item: D3909-041


Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011

Required Date: 9/9/2011


Start Qty: 4.00

Required Qty: 4.00


MS21043-3 Purchased No 100 Each 888.0000 4 16

 Nut


Location	Loc Qty	Loc Code
FG	72	
103691	72	
ST301	816	
112314	6	
118077	310	
118614	500	

 *EP 11/08/31*


MS24665-151 Purchased No 100 Each 427.0000 1 4

 Cotter Pin

Location	Loc Qty	Loc Code
ST309	427	
17566	427	

 *EP 11/08/31*

NAS1149C0332R Purchased No 100 Each 5,587.000 8 32

 Washer

Location	Loc Qty	Loc Code
FP-B	7	
117291	7	
ST297	5580	
116304	55	
117460	62	
117887	182	
118078	2	
118179	86	
118306	292	
118354	4901	

 *EP 11/08/31*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

*NOTE: Date & initial all entries

Picklist Print

Page 5

Friday, August 26, 2011 7:14:00 AM

Work Order ID: 73181



Parent Item: D3909-041



Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 8/26/2011

Required Date: 9/9/2011

Start Qty: 4.00

Required Qty: 4.00

NAS1149C0363R

Purchased

No

100

Each

4,181.000

2

8



Washer

Location

Loc Qty

Loc Code

ST297

4181

114742

4181

Handwritten signature
8/11/08/31
8

Friday, August 26, 2011 7:14:01 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

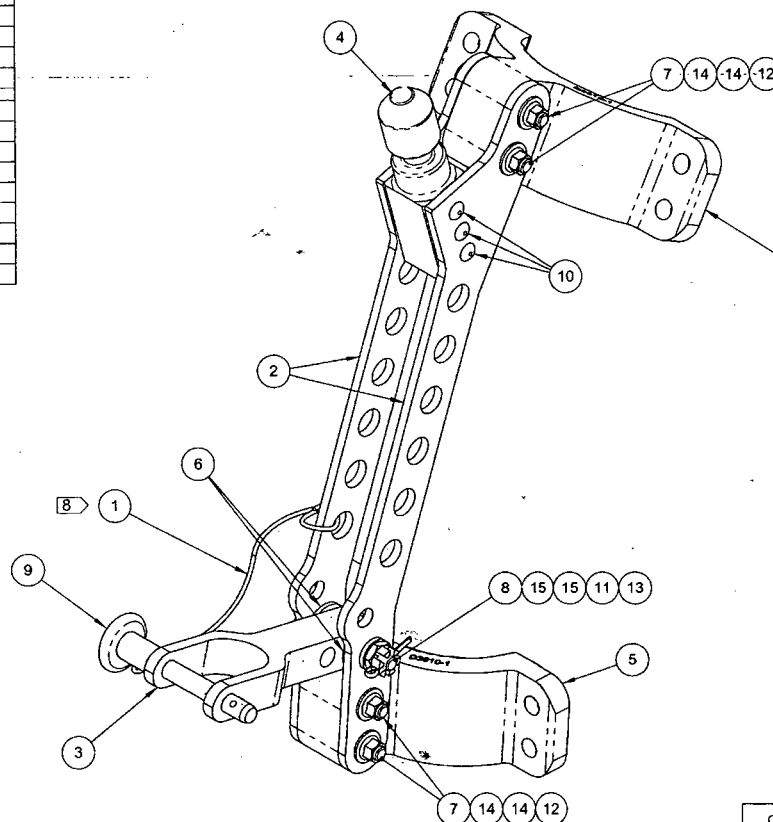
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3909-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	2	D3909-1	FWD X-TUBE LUG PLATE
3	1	D3909-3	FWD LOWER ATTACH ARM
4	1	D3909-5	EYEBOLT STUD
5	2	D3910-1	X-TUBE LUG
6	2	D3917-1	WASHER
7	4	AN3C12A	BOLT
8	1	AN3C13	BOLT
9	1	MS17984-C413	PIP PIN
10	3	MS20615-4M20	RIVET
11	1	AN310C3	NUT - CASTELLATED
12	4	MS21043-3	NUT
13	1	MS24665-151	COTTER PIN
14	8	NAS1149C0332R	WASHER
15	2	NAS1149C0363R	WASHER



D3909-041 FWD X-TUBE LUG ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 73181

CL 11/08/26

RELEASED
2010-08-04

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3909-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.81 lbs
- 8) ATTACH D2690-6 TO D3909-1 BY LOOPING AROUND LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413 PIP PIN'S RING

C	ITEM #4: 1.50 WAS 1.30 (ZN B5-S), 2.88 WAS 2.68 (ZN B6-S); WEIGHT AFFECTED (D3909-041/5).	MB	10.06.18
B	BOM: ADDED ITEM 15 QTY 2 NAS1149C0363R ADDED, ITEM 14 QTY 8 WAS 10. SHT 5, D3909-5 REVISED: SECTION A-A & DIM Ø0.650 REMOVED, SIDE VIEW ADDED, DIM: 2.68 WAS 2.38 REF. 1.30 WAS 1.00, 0.250 WAS 0.220, R0.06 WAS R0.05, WEIGHT REVISED.	JPH	10.04.06
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.06.18		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3909** REV. C
SHEET 1 OF 5
TITLE **FWD X-TUBE LUG ASSY** SCALE NTS

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D3910-1
X-TUBE LUG
2 PL

D2690-6
LANYARD

MS17984-C413
PIP PIN

D3917-1
WASHER

D3909-5
EYEBOLT STUD

MS20615-4M20
RIVET
3 PL

D3909-1
FWD X-TUBE LUG PLATE
2 PL

D3909-3
FWD LOWER ATTACH ARM

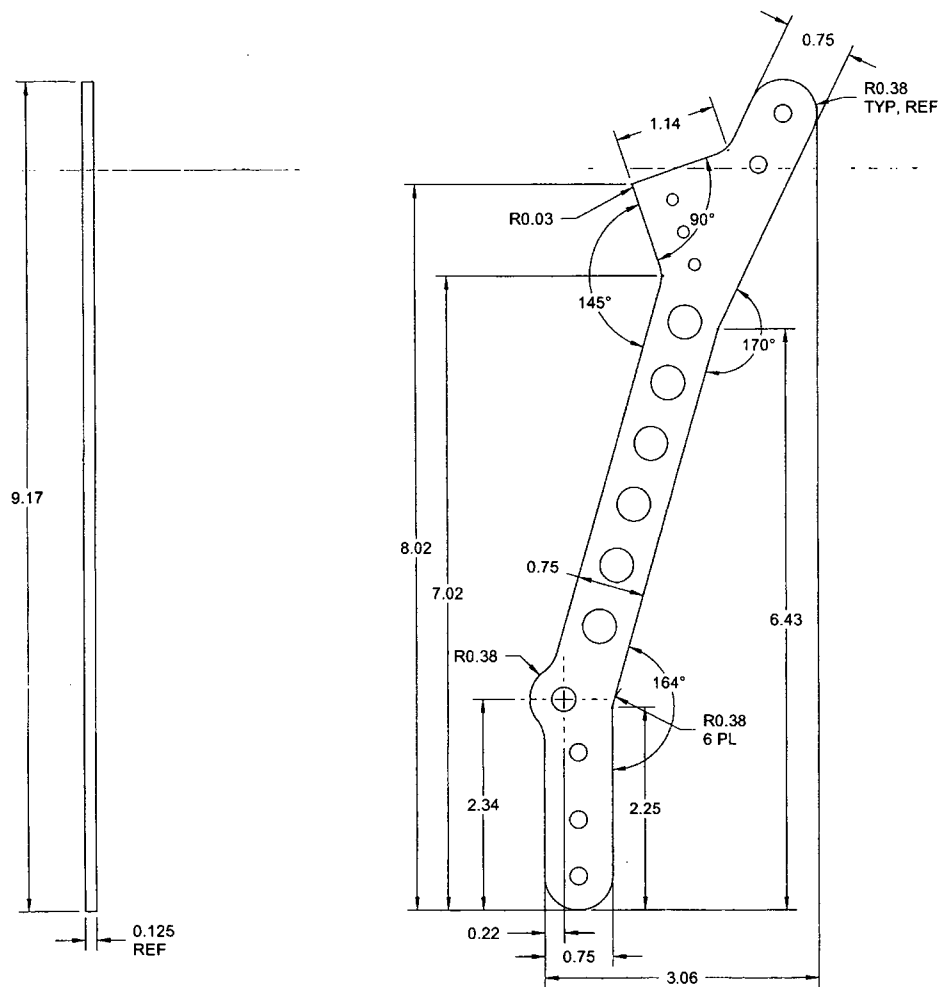
AN3C12A BOLT
NAS1149C0332R WASHER, 2X
MS21043-3 NUT
4 PL

AN3C13 BOLT
NAS1149C0363R WASHER, 2X
AN310C3 NUT - CASTELLATED
MS24665-151 COTTER PIN

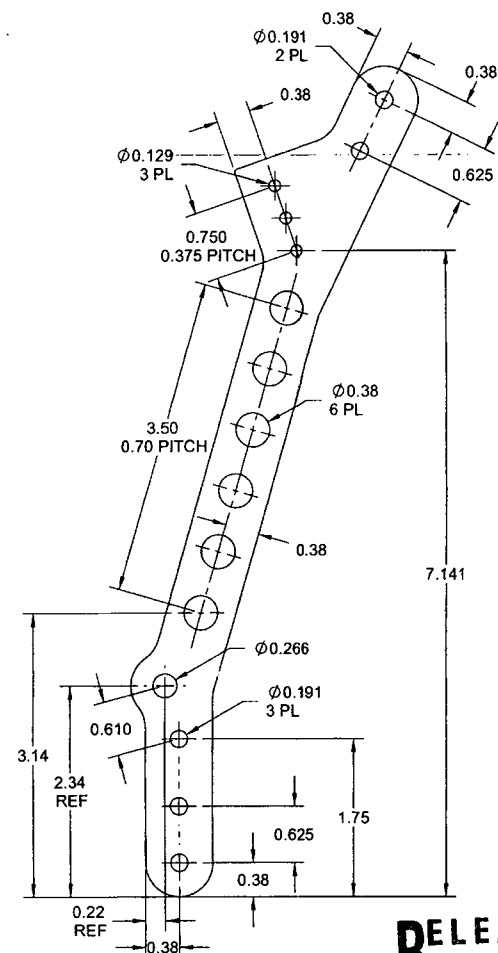
D3909-041 FWD X-TUBE LUG ASSY

RELEASED
2010-08-04

DESIGN	JPH	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JPH	DRAWING NO.	REV. C
MFG. APPR.	JPH	D3909	SHEET 2 OF 5
APPROVED	JPH	TITLE	SCALE
DE APPR.	JPH	FWD X-TUBE LUG ASSY	NTS
DATE	10.06.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3909-1 FWD X-TUBE LUG PLATE



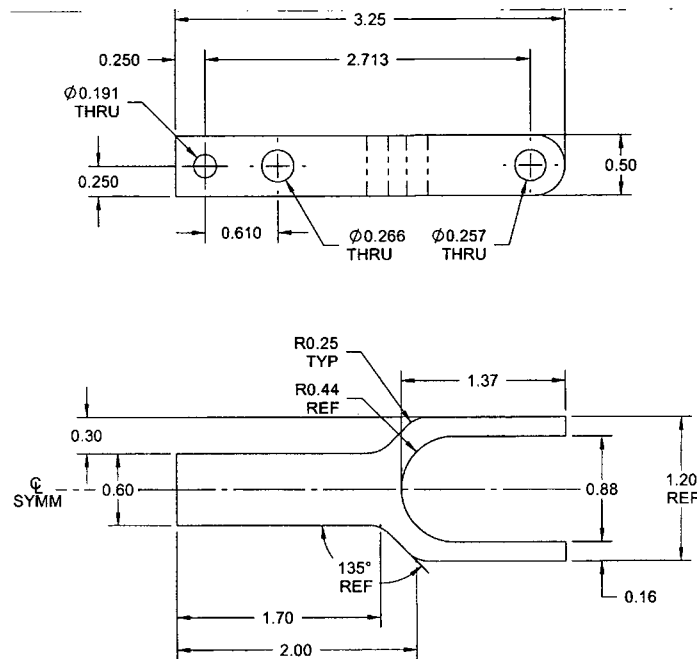
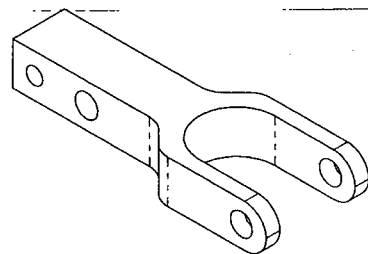
(SUPPLEMENTAL VIEW)

RELEASED
2010-08-01

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" THICK SHEET ANNEALED 2B, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 PER DART SPEC M303S11GA OR M304S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.25 lbs

DESIGN	JPH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3909	REV. C
MFG. APPR.		TITLE	SHEET 3 OF 5
APPROVED		FWD X-TUBE LUG ASSY.	
DE APPR.		NTS	
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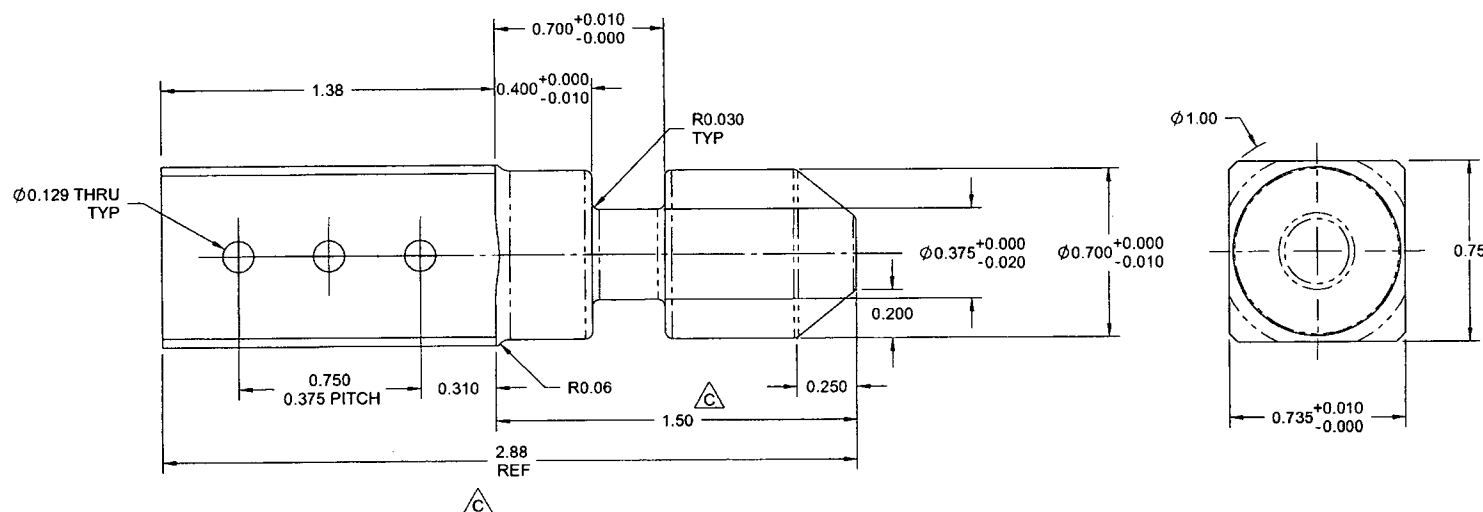
D3909-3 FWD LOWER ATTACH ARM

RELEASED
2010-08-01

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR, PER ASTM A582 OR ASTM A276
PER DART SPEC M303B OR M304B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.22 lbs

DESIGN	JPH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3909	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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RELEASE
2010-08-04
MD

NOTES:
 1) MATERIAL: 303/304/316 STAINLESS STEEL ROUND BAR PER ASTM A582 OR ASTM A276 PER DART SPEC M303R OR M304R
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3909-5" USING FINE POINT PERMANENT INK MARKER
 7) WEIGHT: 0.34 lbs

DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3909 TITLE FWD X-TUBE LUG ASSY COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT IT</small>	REV. 0
DRAWN	<i>[Signature]</i>		SHEET 5 OF 5
CHECKED	<i>[Signature]</i>		SCALE
MFG. APPR.	<i>[Signature]</i>		NTS
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	10.06.18		